DRAFT DISCUSSION PAPER ON THE WATER TRANSFER ELEMENT
CALFED WATER USE EFFICIENCY COMPONENT

March 3, 1997

Introduction

The CALFED Bay Delta Program recognizes that water transfers, particularly inter-basin transfers, are an important part of the effort to enhance water supply reliability. Transfers can provide an effective means of moving water between users on a voluntary and compensated basis. The compensation provided for transferred water can also create incentives for implementation of certain water conservation, efficiency or management practices.

The CALFED approach to transfers will be to emphasize and encourage the development of a rational and regulated market for interbasin transfers, both short and long term. The program will seek to encourage the development of a uniform set of rules and criteria to be applied to transfers by the various agencies which have regulatory authority over transfers or which control the storage and conveyance facilities to which others must have access in order to make the transfer market work efficiently. The Program will also address the need for adequate flexibility and capacity in Delta conveyance facilities so that transfers can be accomplished without impairment of the delivery of Project water supplies.

The Program recognizes that water transfers can have adverse as well as beneficial impacts. In order to minimize or mitigate the adverse impacts of water transfers, the CALFED water transfer element will be guided by the five criteria articulated by the Governor in his 1992 water policy statement.

Excerpt from Governor Wilson's April 1992 Water Policy Statement

"Just as we've learned to harness the power of a vast reservoir, so should we also learn to harness the power of market forces. The success of our State Water Bank proves that voluntary transfers -- or water marketing, as some term it -- does work, and I want to see it work on a an even larger scale.

But water is a vital resource . . . vital to the life of a poor, small town, an estuary, and to a big city of vast wealth. But it may be even more critically necessary to the rural area with its economy almost entirely dependent upon agriculture and the availability of irrigation.

For that reason, even if it's possible to create a totally free water market, there are still key issues that must be resolved with great care to develop a fair and effective transfer policy.

Care must be given to the impact of transfers upon groundwater resources, fish and

E-010037

wildlife, protection of rural communities, and the determination of which entities should have a role in the approval of transfers, and just what that role should be.

There are many pending state and federal legislative initiatives regarding water transfers. Unfortunately, some of them are guaranteed to release only a whitewater flood of lawsuits. I will support legislation that, at a minimum, meets these criteria:

First: Water transfers must be voluntary. And they must result in transfers that are real, not just paper. Above all, water rights of sellers must not be impaired.

Second: Water transfers must not harm fish and wildlife resources and their habitats.

Third: We need to assure that transfers will not cause overdraft or degradation of groundwater basins.

Fourth: Entities receiving transferred water should be required to show that they are making efficient use of existing water supplies, including carrying out urban Best Management Plans or Agricultural Water Efficiency Practices.

Fifth and finally: Water districts and agencies that hold water rights or contracts to transferred water must have a strong role in determining what is done. The impact on the fiscal integrity of the districts and on the economy of small agricultural communities in the San Joaquin Valley can't be ignored . . . any more than can the needs of high value-added, high tech industries in the Silicon Valley.

Of course, our water belongs to all the people of California. State control is more likely where transfers involve use of the state plumbing system, and where our environmental obligations could be affected.

Most of all, in times of severe hardship, the state must be able to provide water to meet critical needs. But within these limits, there are strong roles for both a state-operated Water Bank to ease hardship or satisfy emergency needs . . . and for a free market."

BDAC Policy Review

The question of how the CALFED Program should approach water transfer issues was presented to BDAC for policy advice. The gist of the BDAC policy advice on this matter was that transfers should be considered as an appropriate and useful part of the CALFED water management strategy. Because of the relationships and linkages between water transfers and water use efficiency, as defined for purposes of the CALFED program, BDAC concurred that a water transfer element should be incorporated into the Efficient Water Use Common Component of the Bay Delta solution.

Structure and content of the water transfer element

There will be three parts to the CALFED transfer element.

First, CALFED may develop and submit to forums outside the CALFED process recommendations on water transfer policy or legislative needs. Such recommendations would relate to the further development of a rational and regulated water transfer market in California which operates within the parameters of the Governor's five criteria.

Second, where the administrative policies or actions of individual CALFED agencies affect water transfers, examination of these agency policies or actions may be appropriate, and CALFED will recommend and encourage that CALFED agencies adopt and implement uniform, integrated rules and criteria for the processing and approval of water transfers and for access to storage and conveyance facilities.

Third, the CALFED Program will address the need for adequate flexibility and capacity in Delta channels and conveyance facilities, so that transfer water can be moved across the Delta efficiently and effectively, without interfering or conflicting with the delivery of Project water supplies.

The initial premise of the water transfer element will be to rely on the existing legal structure as much as possible. CALFED will assume initially that new state or federal legislation is not necessary in order to "improve" the existing water market/transfer structure. It may be that most of the barriers are administrative, technical, political and socio-economic, not legal. If issues are identified which can only be resolved by legislation, those will be included in the CALFED legislative package or sent to a forum outside the CALFED process for negotiation.

Objectives of the water transfer element

In addition to the general objectives for the Water Use Efficiency Common Program, there are objectives specific to the water transfer element.

a. Promote, encourage and facilitate the development of water transfer market in California, within the framework of the Governor's water policy.

b. Develop assurances that water transfers will not result in significant unmitigable impacts, consistent with the Governor's water policy.

c. Address the institutional and regulatory issues which need to be resolved to provide for an effective water transfer market.

d. Address the physical issues which need to be resolved to provide for effective cross-Delta water transfers.

e. Encourage transfers that result in multiple benefits from the use of the water, while mitigating for local impacts.

f. Promote and encourage standardized rules for transfers using state and federal project facilities and cross-Delta conveyance capacity.

g. Promote and encourage the development of standardized rules for transfers based on replacement with groundwater and other conjunctive use type transfers.

h. Identify and promote understanding of Delta carriage water issues as these relate to interbasin water transfers.

Essential elements of an effective water market

CALFED staff has identified some of the essential elements or fundamental requirements of a water transfer market which would operate within the framework of the Governor's water policy and achieve the CALFED objectives.

a. The seller must have a quantifiable and transferable interest in a water supply. This interest must be clearly defined, legally and technically. All interested parties must be able to agree on the nature and quantity and transferability of this interest in water.

b. The transfer must occur between a willing seller and a willing buyer at a price and on terms mutually agreeable to both.

c. There must be sufficient, available and reasonably priced capacity (pumping, conveyance and storage) in the water conveyance systems (Delta, aqueducts, and local systems) to accommodate the transfer, without displacing higher priority movements of water (i.e., Project contract deliveries).

d. The parties must be able to mitigate adverse environmental impacts to an acceptable level, including adverse impacts on local groundwater resources.

e. The parties must be able to mitigate local socio-economic impacts to an acceptable level.

f. The parties must be able to accomplish the transfer in a timely manner; the regulatory process (permits and approvals) must be clearly defined and understood. The regulatory process should be constructed and operated to facilitate, not discourage, transfers.

E-010040

Issues to resolve in developing an effective water market

The CALFED water transfer element can be used to identify and resolve issues which have impaired the development of a more efficient water transfer market. Some of these issues are:

a. lack of uniform or standard rules on what constitutes saved or conserved water;

b. lack of agreement among USBR, DWR, and State Board on what constitutes transferable water;

c. lack of agreement on carriage water requirements in the Delta;

d. the argument over user vs District initiated transfers;

e. timing and processing problems (e.g. State Board permits and approvals, DWR/USBR approvals, CEQA/NEPA/ESA compliance);

f. local ordinances restricting groundwater exports;

g. lack of agreement on nature, extent and ability to mitigate third party impacts.

h. reservoir refill criteria and policies.

Possible CALFED approaches to address these issues

The CALFED water transfer element can be a vehicle for the development of recommendations or proposals to CALFED agencies and to other forums or processes outside CALFED on how a more efficient water transfer market can be developed, consistent with the CALFED solution principles and the Governor's water transfer policy. Some of the possible approaches are:

a. Develop recommendations for DWR, USBR and State Board on permit coordination (timing and processing problems).

b. Develop recommendations for DWR and USBR on definitions of conserved water and transferable water (real vs paper water).

c. Develop recommendations for USBR and DWR on carriage water considerations for cross Delta transfers.

d. Address groundwater issues, e.g. - should pump and replace transfers be considered "efficient" uses of water if there is no "approved" conjunctive use program?

E-010041

e. Address third party impacts, e.g. - should transfer price include payment to county or other local entity if this would mitigate identified socio-economic impacts?

f. Consider whether amendments to CEQA/NEPA would facilitate long term transfer agreements without permitting increased environmental impacts.

Tools available to CALFED

In the context of the issues and approaches described above, how can CALFED promote or facilitate an effective and efficient water market? Several tools have been identified which may of some utility in furthering the development of a statewide water market.

1. Comprehensive Water Transfer Rules - A uniform and comprehensive set of rules for water transfers could be proposed based on the existing statutory framework. Critical items of comprehensive water transfer rules would include: 1) a consistent and uniform basis for determining what constitutes saved or conserved water and what constitutes transferable water; 2) protection of the underlying contract or water right on which the transfer is based; 3) avoidance or mitigation of third party impacts on groundwater conditions, the local economy, and the local environment; 4) encouragement of transfers that provide instream flow benefits and do not impact fish and wildlife. Some encouragement could be provided through the permitting and approval process (see next item); and 5)coordination of the current permitting and approval process. This would be accomplished by defining transferable water in one of two ways: 1) water associated with reductions in consumptive use, irrecoverable losses, or actively managed and monitored conjunctive use; or, 2) water associated with reductions in recoverable losses. Each of the two categories would be governed by a slightly different set of transfer rules and guidelines with the intention of protecting in-basin resources and third parties. Distinctions would also be made to address in-basin versus out-of-basin transfers. Emphasis would be placed on timing transfers to coincide with instream flow benefits, possibly by offering incentives.

Purpose: Create opportunities for agricultural water users to become more flexible with water management and make water available for multiple benefits.

Strength: Creates incentives to manage water more efficiently; no net impact to local basin hydrologic resources; streamlines transfer process and creates consistency in determination of transferable water; provides protection for groundwater resources and safeguards for groundwater users;

Weakness: Potential negative impact to local economies; could negatively impact habitat areas; may reduce the amount of commodity-producing land.

Use with other tools: This tool could work well in conjunction with other tools including a structured water transfer tax, water management planning, and price incentives for

conjunctive use. Safeguards to protect third party interests would be vital to the use of this tool. Use of this tool does not preclude the use of other tools.

Examples of actual use: There are not examples within the state of one overall transfer market working under a coherent set of rules. In recent years there have been many water transfers occurring throughout the state. However, the majority are only short-term and based on a variety of existing sections of the Water Code. Some transfers had little or no effect beyond the parties involved, while others caused tremendous controversy. The main example of a transfer market is the state's Drought Water Bank. This market only dealt with short-term transfers and allowed pumping of groundwater, a highly controversial component of the program. Allowing the pumping of groundwater by surface water users may have caused negative impacts to surrounding groundwater users.

2. Water Rights Assurances - Under existing water rights law, water that is not used for five years is abandoned or forfeited. The law is also clear that conservation of water and transfers of water are reasonable and beneficial uses. Understandably, there are concerns among agricultural water users that water saved or transferred for other uses might be forfeited after a period of years. This is a powerful disincentive to conserve or to achieve a higher level of efficiency and it acts as a disincentive to engage in long-term transfers. To remove this barrier, specific regulatory assurances could be developed stating that saved/conserved and transferred water is not lost to the underlying water supply contract or water right. Such assurances will reaffirm California law and commit to the water rights priority system and the area of origin laws.

Purpose: Provide necessary assurances to water rights holders to allow for implementation of cost-effective water efficiency improvements that otherwise may have appeared to place water rights at risk.

Strength: Removes disincentive to conservation and long-term water transfers; provides necessary assurances to agricultural water users; acts as incentive to meet conditions as soon as possible so as not to jeopardize a transfer with added delays.

Weakness: May have difficulty justifying water rights after very long-term transfers (e.g., >30 years); added conditions may slow the approval process and delay transfers

Use with other tools: Combining this tool with comprehensive water transfer laws will provide the assurances necessary for a transfer market to be successful. Use of this tool will not hamper the use of other tools.

Examples of actual use:

3. Conditions for transfer of marketed water - Agencies wishing to buy or sell water through transfers would be subject to conditions prior to approval of the transfer. Conditions could include requiring the agencies to have an adopted and implemented water management plan, or

E-010043

other conservation based conditions. Currently, transfers between agencies need to be approved by the SWRCB, the SWP, and/or the CVP depending on the water being transferred and the facilities being used to transfer. Pre-1914 rights are not subject to approvals and typically would not be on the receiving end of transfers.

Purpose: Create incentives to study and/or implement cost-effective water use efficiency improvements.

Strength: Acts as an incentive for conservation; uses market pressure to gain compliance.

Weakness: May limit participation in markets and decrease measures implemented to increase water available for transfers.

Use with other tools: This is currently included in the Water Use Efficiency approach as a general assurance.

Examples of actual use:

4. Structured Water Transfer Tax - One of the concerns of a water transfer market is the potential effect on local socio-economic conditions. To address this concern, a tax could be levied on all transfers to be paid to the local county or governing body to mitigate for potential socio-economic impacts. Money derived through this tax would be used to offset increases in social programs or other aspects that may be affected because of the transfer. An important aspect of the transfer tax approach would be to develop a mechanism to assure affected parties are reimbursed in proportion to the impacts of the transfer on each party. Such a tax could also be structured to control the amount of water transferred out of any one region by creating a progressive tax (e.g., the tax rate would increase for each additional block of water transferred from the region). This would increase the cost of the water and require buyers and sellers to analyze the opportunities and impacts more closely. Taxes should also be structured to encourage non-impacting transfers.

Purpose: Provide mechanism to avoid local socio-economic impacts and to providing funding for mitigation of those that are unavoidable.

Strength: Mitigates for potential local socio-economic impacts resulting from transfers; if tiered tax is used, acts a price incentive to limit quantity of water transferred from any one region; requires close tracking of all transfers, thus providing a good accounting tool.

Weakness: Creates additional accounting complications; difficult to determine who would control money and who would receive benefits; a tax may not be the appropriate method to mitigate for socio-economic impacts; a general transfer tax could act more as a disincentive to willing sellers; forcing a specified tax limits the ability to individually address impacts specific to each transfer; politically unpopular.

Use with other tools:

Examples of actual use:

5. State Drought Water Bank Conditions - Conditions would be placed on agencies wanting to participate in the state's Drought Water Bank (Bank). These conditions could state that the Bank will not make water available to any buyers unless they have completed water management planning according to the AB 3616 MOU or other specified standards. In the same manner, similar conditions could be placed on those wanting to sell water to the bank. More stringent conditions could be included to further encourage efficiency improvements by requiring implementation of cost-effective EWMPs. Agencies that do not meet the requirements may either not be able to receive Bank water or may have to pay an additional premium for the water delivered (i.e., surcharge). If conditions included implementation of measures, then consideration of "satisfactory progress" would be necessary.

Purpose: Create an incentive to study and/or implement cost-effective water use efficiency improvements.

Strength: Acts as an incentive for agencies to implement efficiency improvements; not extremely difficult for agencies to comply.

Weakness: Requires more staff time to review and approve Drought Water Bank transactions.

Use with other tools: Limited access on the availability of Bank water would work well with a required water management planning process. Conditions would generally not hamper the use of other tools since desire for Bank water would be a decision made by individual districts according to their own supply/demand situation.

Example of actual use: The Drought Water Bank, as stated in the 1993 Program EIR, requires agricultural agencies to implement EWMPs, according to a schedule anticipated in the MOU, in order to be eligible for Bank water.

TRANSFER.6--DRAFT--March 3, 1997

E-010045